

Title (en)
Improved measurement system for a material transfer vehicle

Title (de)
Verbessertes Messsystem für ein Materialtransferfahrzeug

Title (fr)
Système de mesure amélioré pour véhicule de transfert de matériel

Publication
EP 2910911 A1 20150826 (EN)

Application
EP 14397508 A 20140221

Priority
EP 14397508 A 20140221

Abstract (en)
This invention relates generally to a measurement system (20) of a material transfer vehicle. The present invention can be applied in weighing a load of the vehicle. The material transfer vehicle may be e.g. a wheel loader, a forklift, an excavator, a dumper, a forwarder, a harvester, a crane, a passenger hoist, a timber jack, or a truck such as a fire truck, forklift truck, a pallet truck, a reach truck, or a garbage truck. Prior art measuring systems often have insufficient capability to compensate varying positions and movement of the material transfer vehicle structures. The object of the invention is met by a solution, wherein a material transfer vehicle has at least one first sensor unit (21) including a weighing sensor for weighing a load of a vehicle, and at least one second sensor unit (22a, 22b, 22c) for measuring an angular position/movement of a boom and/or a carrying means of the vehicle. According to the invention, the second sensor unit has a gyroscope and an accelerometer.

IPC 8 full level
G01G 19/08 (2006.01)

CPC (source: EP)
G01G 19/083 (2013.01)

Citation (applicant)
EP 1083415 B1 20051123 - TAMTRON OY [FI]

Citation (search report)
[X1] EP 2511678 A1 20121017 - TAMTRON OY [FI]

Cited by
EP3792603A1; SE1951035A1; SE543789C2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2910911 A1 20150826; CN 104864950 A 20150826

DOCDB simple family (application)
EP 14397508 A 20140221; CN 201510080373 A 20150213